If you are using a printed copy of this procedure, and not the on-screen version, then you <u>MUST</u> make sure the dates at the bottom of the printed copy and the on-screen version match.

The on-screen version of the Collider-Accelerator Department Procedure is the Official Version. Hard copies of all signed, official, C-A Operating Procedures are available by contacting the ESSHQ Procedures Coordinator, Bldg. 911A

C-A OPERATIONS PROCEDURES MANUAL

C-A OPERATIONS PROCEDURES MANUAL							
	7.1.75 1005R Vacuum Pump-Outs						
Text Pages 2 through 5							
Hand Processed Changes							
HPC No.	<u>Date</u>	Page Nos.	<u>Initials</u>				

Approved: <u>Signature on File</u> Collider-Accelerator Department Chairman Date

K. Riker

7.1.75 1005R Vacuum Pump-Outs

1. Purpose:

This procedure provides a list of pump-out ports for the RHIC refrigerator room vacuum jacketed lines.

2. Responsibilities:

A RHIC Cryogenic Mechanical Technician is responsible for implementing this procedure

3. <u>Prerequisites:</u>

None

4. **Precautions:**

Ensure compliance with the Fall Protection section of the SBMS before working at heights.

5. <u>Procedure:</u>

Before each RHIC cooldown, all the vacuum jacketed lines in 1005R must be checked/pumped out to ensure that they are less than 50 microns. Use Table 5.1, and Drawing 3A995047 (Interconnecting Piping Diagram) to locate the pump-outs. Record the final readings in the Table.

Table 5.1 Bldg 1005R Vacuum Jacketed Lines Pump-Out Port Locations

VACUUM READING		COMMENTS	
Reading	Date		
		Connects CB #3 to CB #4 (16 " line)	
		Connects CB #3 to CB #4 (16 " line	
		Connects CB #3 to CB #4 (16 " line)	
		Connects CB #3 to CB #4 (16 " line	
		From Adsorber A + B valves H371A,H771A	
		From Adsorber A + B valves H371A,H771A	
		From Adsorber A + B valves H371A,H771A	
		From CB#3 to Adsorber A+B	
		From CB#3 to Adsorber A+B	
		From CB#3 to Adsorber A+B	
		From CB#3 to Adsorber A+B valves H362A,H762A	
		From CB#3 to Adsorber A+B valves H362A,H762A	
		From CB#3 to Adsorber A+B valves H362A,H762A	
		From CB#3 to Adsorber A+B valves H362A,H762A	
		From CB#3 to turbine pod #4.	
		From CB#3 to turbine pod #4.	
		From CB#3 to turbine pod #4.	
		From CB#3 to turbine pod #3.	
		From CB#3 to turbine pod #3.	
		From CB#3 to turbine pod #3.	
		From CB#3 to turbine pod #3.	
		From CB#3 to turbine pod #3.	
		From CB#3 to turbine pod #3.	
		From CB#3 to turbine pod #4.	
		From CB#3 to turbine pod #4.	
		From CB#3 to turbine pod #4.	
		From Turbine #4 (H760M) to CB #3.	
		From Turbine #4 (H760M) to CB #3	
		From Turbine #4 (H760M) to CB #3	
		From turbine Pod #3 (H360M) to CB #3.	
		From turbine Pod #3 (H360M) to CB #3.	
		From turbine Pod #3 (H360M) to CB #3.	
		From Turbine pod #5 to CB #4.	
		From Turbine pod #5 to CB #4.	
		From Turbine pod #5 to CB #4.	
		From Turbine pod #5 to CB #4.	
		(Cold turbine inlet filters)	
		From CB#4 to turbine pod #6.	
		From CB#4 to turbine pod #6.	
		From CB#4 to turbine pod #6.	
		From CB #4 to turbine pod #6.	
		From CB #4 to turbine pod #6.	
		From CB #4 to turbine pod #6.	
		From CB #4 to turbine pod #6.	
		From CB #4 to turbine pod #5.	
		From CB #4 to turbine pod #5.	
		From CB #4 to turbine pod #5.	
	VACUUM REA		

VACUUM PUMP OUT	VACUUM READING		COMMENTS
	Reading	Date	
FSP-21-1			From CB#4 to turbine pod #5
FSP-21-2			From CB#4 to turbine pod #5
FSP-21-3			From CB#4 to turbine pod #5
FSP-24-1			From CB#4 to CB#6
FSP-24-2			From CB#4 to CB #6
FSP-31-1			From H156M to CB#3
FSP-31-2			From H156M to CB#3
FSP-31-3			From H156M to CB#3
FSP-31-4			From H156M to CB#3
FSP-32-1			From H157M to CB#3
FSP-32-2			From H157M to CB#3
FSP-32-3			From H157M to CB#3
FSP-38-1			From H799M to CB#4
FSP-38-2			From H799M to CB#4
FSP-38-3			From H799M to CB#4
FSP-39-1			Top of Turbine pod 7(CB#5 square box)
FSP-39-2			Top of Turbine pod 7(CB#5 square box)
FSP-39-3			Top of Turbine pod 7(CB#5 square box)
FSP-40-1			From H399M to CB#4
FSP-40-2			From H399M to CB#4
FSP-40-3			From H399M to CB#4
FSP-41-1			From H158M to CB#4 (Very high)
FSP-41-2			From H158M to CB#4
FSP-41-3			From H158M to CB#4
FSP-41-4			From H158M to CB#4 (found nearest H158M)
FSP-46-1			Outside connecting CB#3 & CB #4
FSP-46-2			Outside connecting CB#3 & CB #4
FSP-47-1			Outside connecting CB#3 & CB#4
FSP-47-2			Outside connecting CB#3 & CB#4
FSP-48-1			From turbine pod #5 to CB#4
FSP-48-2			From turbine pod #5 to CB#4
FSP-48-3			From turbine pod #5 to CB#4
FSP-51-1			From CB#4 to CB#6
FSP-51-2			From CB#4 to CB#6
C-C.#1			Cold compressor pod #1
C.C.#2			Cold compressor pod #1

6. <u>Documentation:</u>

Record final vacuum readings in Table 5.1

7. <u>References:</u>

- 7.1 3A995047 Interconnecting Piping Diagram
- 7.2 SBMS Fall protection

8. <u>Attachments:</u>

None